

### Abstract

The present invention provides a method for processing a metal body which can turn a metal structure of the metal body into a finer grain structure thus obtaining the high strength and the high ductility. In a method or an apparatus for processing a metal body which turns the metal structure of the metal body into the finer grain structure by forming a low deformation resistance region where the deformation resistance is locally lowered in the metal body and by deforming the low deformation resistance region by shearing, using a non-low deformation resistance region forming means which forms a non-low deformation resistance region by increasing the deformation resistance which is lowered in the low deformation resistance region, the non-low deformation resistance region is formed along the low deformation resistance region.